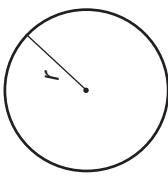


Algebra 1

Reference Sheet

(To be used with Sections 1 and 2)

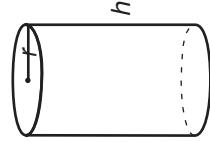
Circle



$$\text{Area} = \pi r^2$$

$$\text{Circumference} = 2\pi r$$

Cylinder



$$\text{Area} = lw$$

$$\text{Perimeter} = 2l + 2w$$

Rectangle



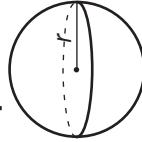
$$\text{Volume} = \pi r^2 h$$

$$\text{Surface Area} = 2\pi r^2 + 2\pi rh$$

$$\text{Volume} = \frac{4}{3}\pi r^3$$

$$\text{Surface Area} = 4\pi r^2$$

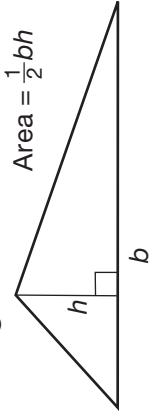
Sphere



$$\text{Volume} = \frac{4}{3}\pi r^3$$

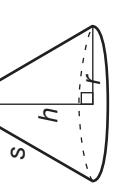
$$\text{Surface Area} = 4\pi r^2$$

Triangle



$$\text{Area} = \frac{1}{2}bh$$

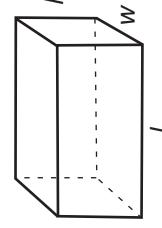
$$\text{Cone}$$



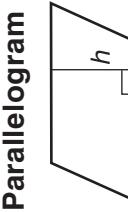
$$\text{Volume} = \frac{1}{3}\pi r^2 h$$

$$\text{Surface Area} = \pi r^2 + \pi rs$$

Rectangular Prism



$$\text{Area} = bh$$



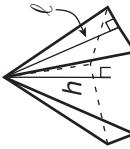
Parallelogram

$$\text{Rectangular Prism}$$

$$\text{Volume} = lwh$$

$$\text{Surface Area} = 2wl + 2lh + 2wh$$

Right Pyramid



$$\text{Volume} = \frac{1}{3} \times \text{base area} \times h$$

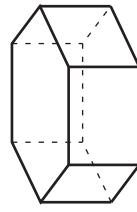
$$\text{Surface Area} = \text{base area} + \text{face areas}$$

Pythagorean Theorem

$$y = mx + b$$

$$\text{POINT-SLOPE FORM: } y - y_1 = m(x - x_1)$$

Right Prism



$$\text{Volume} = \text{base area} \times h$$

$$\text{Surface Area} = \text{base areas} + \text{face areas}$$

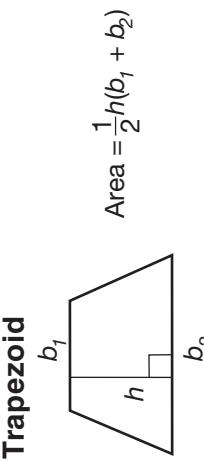
Formulas

$$\text{DISTANCE BETWEEN TWO POINTS: } d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$\text{MID-POINT BETWEEN TWO POINTS: } \left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$

$$\text{SLOPE: } m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$\text{Trapezoid}$$



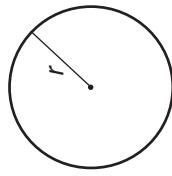
$$\text{Area} = \frac{1}{2}h(b_1 + b_2)$$

Álgebra 1

Hoja de referencia

(Para uso con las secciones 1 y 2)

Círculo

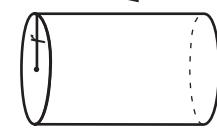


$$\text{Área} = \pi r^2$$

$$\text{Circunferencia} = 2\pi r$$

$$\text{Circunferencia} = \pi d$$

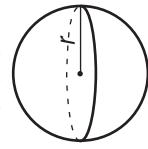
Cilindro



$$\text{Volumen} = \pi r^2 h$$

$$\text{Área de superficie} = 2\pi r^2 + 2\pi r h$$

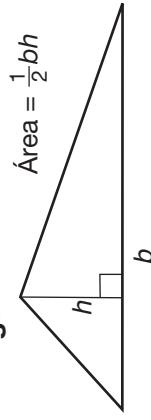
Esfera



$$\text{Volumen} = \frac{4}{3}\pi r^3$$

$$\text{Área de superficie} = 4\pi r^2$$

Triángulo



$$\text{Área} = \frac{1}{2}bh$$

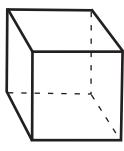
Rectángulo



$$\text{Área} = lw$$

$$\text{Perímetro} = 2l + 2w$$

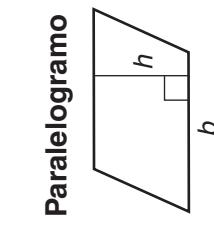
Cubo



$$\text{Volumen} = s^3$$

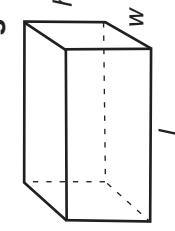
$$\text{Área de superficie} = 6s^2$$

Paralelogramo



$$\text{Área} = bh$$

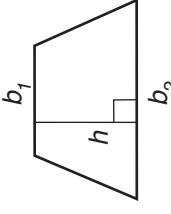
Prisma rectangular



$$\text{Volumen} = lwh$$

$$\text{Área de superficie} = 2wl + 2lh + 2wh$$

Trapecio



$$\text{Área} = \frac{1}{2}h(b_1+b_2)$$

Fórmulas

DISTANCIA ENTRE DOS PUNTOS:

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

PUNTO MEDIO ENTRE DOS PUNTOS:

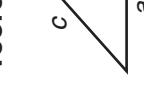
$$\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$

PENDIENTE:

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

FÓRMULA DE INTERCEPCIÓN EN PENDIENTE:

FÓRMULA DE PUNTO EN UNA PENDIENTE:



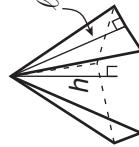
$$a^2 + b^2 = c^2$$

Teorema de Pitágoras

$$y = mx + b$$

$$y - y_1 = m(x - x_1)$$

Pirámide recta



$$\text{Volumen} = \frac{1}{3}\pi r^2 h$$

$$\text{Área de superficie} = \text{área de la base} + \text{áreas de las caras}$$

Prisma recto



$$\text{Volumen} = \text{área de la base} \times h$$

$$\text{Área de superficie} = \text{áreas de las caras}$$